

**Amendments to the Abstract:**

Please substitute the following version of the Abstract, with changes shown by strikethrough (for deletions) or underlining (for added matter).

ABSTRACT OF THE DISCLOSURE

A gas permeable probe for use in an optical analyzer for an exhaust gas stream flowing through a duct or chimney ~~comprises~~ has:

- an elongate hollow structure having first and second ends and a side wall, with an optical cavity defined between ~~said the~~ first and second ends within ~~said the~~ side wall,
- a filter forming part of ~~said the~~ elongate hollow structure,
- a mounting structure at ~~said the~~ first end and adapted for mounting ~~said the~~ elongate hollow structure within ~~said the~~ duct or chimney,
- an optical window at ~~said the~~ first end permitting a light beam originating from an optical analyzer to enter into ~~said the~~ optical cavity to travel from ~~said the~~ first end to ~~said the~~ second end,
- a retroreflector provided at ~~said the~~ second end for returning ~~said the~~ light beam to ~~said the~~ first end of ~~said the~~ hollow structure, and
- a tube disposed within ~~said the~~ mounting structure and having first and second opposite ends, ~~said the~~ first opposite end being located remote from ~~said the~~ first end of ~~said the~~ elongate hollow structure and being closed by a first window adapted to transmit ~~said the~~ light beam from an optical analyzer into the tube and ~~said the~~ second end of ~~said the~~ tube being closed by a second window adapted to transmit ~~said the~~ beam of light from ~~said the~~ tube into ~~said the~~ optical cavity and ~~said the~~ returned light beam from ~~said the~~ optical cavity into ~~said the~~ tube, ~~said the~~ tube thereby defining a closed cavity, ~~said the~~ closed cavity being one of an evacuated cavity and a cavity containing a neutral gas.